

ABSTRACT

A method and system for providing remote procedure calls in a multiprocessing system is disclosed. The multiprocessing system includes a general purpose processor and a plurality of network processors. Each of the plurality of network processors includes a memory. The method and system comprises accessing a reserved address in at least one of the network processors and initiating a software action by a first portion of the reserved address. The method and system further includes pointing to an address within the memory of the at least one network processor to be processed based upon data in a second portion of the reserved address, wherein the data at the address is processed. A system and method in accordance with the present invention provides an indirect software jump in a microprocessing system through providing a reserved address in memory of each of the reserved address includes two portions. A first portion of the address triggers the software event requested by the general purpose processor (for example) and a second portion of the reserved address is utilized to process the data that was loaded at that address in the processor. The indirect software jump allows a general purpose processor to execute software on a network processor indirectly for custom application services or debug operations.